REMARKS

By this response, claims 1-20 are pending, in which no claims are amended, canceled, withdrawn, or newly presented. No new matter is introduced.

The final Office Action mailed May 17, 2004 rejected claims 1, 4, 6-10, 13, and 15-20 under 35 U.S.C. § 103(a) as obvious over *Chang et al.* (US 5,870,753), and claims 2-3 and 11-12 under 35 U.S.C. § 103(a) as obvious over *Chang et al.* in view of *Bennett* (US 6,014,733). This rejection is respectfully traversed because there is no legally permissible motivation to modify either *Chang et al.* alone or in combination with *Bennett* to disclose, teach, or otherwise suggest the limitations of the claims.

For example, independent claims 1 and 10 recite:

if the XREF pointers array includes a pointer associated with said reference located in the longer-duration memory, then following said pointer to locate said instance within said shorter-duration memory.

As another example, independent claims 6 and 15 recite:

to dereference said reference located in the longer-duration memory.

These features are not shown in *Chang et al.*, as the Office Action correctly acknowledged: "Chang does not explicitly teach the pointer associated with the reference located in the longer-duration memory" (Office Action, page 3, ¶ 3; page 4, ¶ 10). In fact, *Chang et al.* fails to show any reference located in persistent storage 74' at all. *Chang et al.* at best shows the opposite direction: the object reference 76 located in server memory 70 points to state 73' in persistent storage 74', not the other way round.

Despite Chang et al.'s lack of evidentiary support for the rejection, the Office Action contended it would have been obvious "to improve the system of Chang because it would improve the performance of the system when determining the existing [sic, existence?] of the

object" (Office Action, p. 3, ¶ 7). It is unclear, however, how the proposed modification would actually "improve the performance of the system," because access of the key 78 in persistent storage 92 of *Chang et al.* would add unnecessary processing time to the already disclosed access of the key 78 in the memory 90 to find the pointer 77 in the reference data table in memory 90.

In support of the obviousness rejection, the Office Action stated that "the shorter-duration memory associated with the reference [is?] located in the shorter-duration memory and longer-duration memory (col. 5, lines 23-59 and Figs. 8-9)" (id.). The Office Action's statement is somewhat confusing because it implies that object reference 76 can exist in two different places at the same time, whereas Chang et al. only discloses it to be located in server memory 70. The cited passage of Chang et al. merely states that copies of one part of the object reference 76 (that is, the key 78) are stored in both (RAM) memory and persistent storage: "Object reference 76, contains the key 78, which is used by the server process to associate the object reference with a row in the reference data table in both persistent storage 92 and in memory 90" (col. 5:49-51). Accordingly, the record lacks the requisite factual basis to sustain the rejection.

The Office Action also argued: "It is also noted that in the specification, the XREF pointers array is searched to determine whether the object associated with the XREF has been activated" (Office Action, p. ¶ 6, emphasis added). Obviousness rejections, however, require some evidence in the prior art of a teaching, motivation, or suggestion to combine and modify the prior art references. See, e.g., McGinley v. Franklin Sports, Inc., 262 F.3d 1339, 1351-52, 60 USPQ2d 1001, 1008 (Fed. Cir. 2001); Brown & Williamson Tobacco Corp. v. Philip Morris Inc., 229 F.3d 1120, 1124-25, 56 USPQ2d 1456, 1459 (Fed. Cir. 2000); In re Dembiczak, 175 F.3d 994, 999, 50 USPQ2d 1614, 1617 (Fed. Cir. 1999). Here, the explicit use of portions of the specification of the present application for suggestions to modify Chang et al. indicates that the motivation is influenced by impermissible hindsight.

Furthermore, the proposed modification to *Chang et al.* requires non-analogous art. "A reference is reasonably pertinent if, even though it may be in a different field from that of the inventor's endeavor, it is one which, because of the matter with which it deals, logically would have commended itself to an inventor's attention in considering his problem." *In re Clay*, 966 F.2d 656 (Fed. Cir. 1992). *Chang et al.* is not reasonably pertinent to the problem with which the present inventors are concerned, namely "accessing an instance of a recreatable object in a shorter-duration memory based on a reference located in a longer-duration memory" (claim 1). The problem that *Chang et al.* is concerned with is the problem of maintenance of multiple metastates for a persistent object without increasing the size of the object reference (Abstract). *Chang et al.* is blissfully unaware of any problems with accessing shorter-duration instances of activatable objects based on object references stored in longer-duration memory. Because *Chang et al.* is not reasonably pertinent to addressing issues with object references stored in longer-duration memory, there is no motivation for one of ordinary skill in the art to modify the disclosure of *Chang et al.*

Bennett, applied only to claims 2-3 and 11-12, is directed to a method for creating a "perfect hash" and also does not show the above-quoted limitations of the claims. Therefore, the rejection of claims 1-4, 6-13, and 15-20 should be withdrawn.

Therefore, the present application overcomes the objections and rejections of record and is in condition for allowance. Favorable consideration is respectfully requested. If any unresolved issues remain, it is respectfully requested that the Examiner telephone the undersigned attorney at 703-425-8516 so that such issues may be resolved as expeditiously as possible.

Respectfully Submitted,

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